#### CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL VALLEY REGION REVISED MONITORING AND REPORTING PROGRAM 93-240-002 FOR AMADOR REGIONAL OUTFALL AND CASTLE OAKS GOLF COURSE AND DEVELOPMENT AMADOR REGIONAL SANITATION AUTHORITY CITY OF IONE PORTLOCK INTERNATIONAL, LTD AMADOR COUNTY

This revised Monitoring and Reporting Program (MRP) is issued pursuant to Water Code Section 13267. The Discharger shall not implement any changes to this MRP unless and until the Central Valley Regional Water Quality Control Board (Central Valley Water Board) adopts, or the Executive Officer issues, a revised MRP. Specific sample station locations shall be approved by Regional Board staff prior to implementation of sampling activities.

Water Code section 13267 states, in part:

"In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste within its region, or any citizen or domiciliary, or political agency or entity of this state who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharging, or who proposes to discharge, waste outside of its region that could affect the quality of waters within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports."

Water Code section 13268 states, in part:

"(a) Any person failing or refusing to furnish technical or monitoring program reports as required by subdivision (b) of section 13267, or failing or refusing to furnish a statement of compliance as required by subdivision (b) of section 13399.2, or falsifying any information provided therein, is guilty of a misdemeanor and may be liable civilly in accordance with subdivision (b).

(b)(1) Civil liability may be administratively imposed by a regional board in accordance with article 2.5 (commencing with section 13323) of chapter 5 for a violation of subdivision (a) in an amount which shall not exceed one thousand dollars (\$1,000) for each day in which the violation occurs."

Pursuant to Water Code section 13267, the Discharger shall implement this MRP and shall submit the monitoring reports described herein.

All samples shall be representative of the volume and nature of the discharge or matrix of material sampled. The name of the sampler, sample type (grab or composite), time, data, location, bottle type, and any preservative used for each sample shall be recorded on the sample chain of custody form. The chain of custody form must also contain all custody information including data, time, and to whom samples were relinquished. If composite samples are collected, the basis for sampling (time or flow weighted) shall be approved by Central Valley Water Board staff.

Field test instruments (such as those used to measure pH, dissolved oxygen, electrical conductivity, wind speed, and precipitation) may be used provided that they are used by a State Water Board California Environmental Laboratory Accreditation Program (ELAP) certified laboratory, or:

- 1. The operator is trained in proper use and maintenance of the instruments;
- 2. The instruments are field calibrated at the frequency recommended by the manufacturer;
- 3. The instruments are serviced and/or calibrated at the manufacturer's recommended frequency; and
- 4. Field calibration reports are maintained and submitted as described in the "Reporting" section of the MRP.

Laboratory analytical procedures shall comply with the methods and holding times specified in the following: Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater (EPA); Test Methods for Evaluating Solid Waste (EPA); Methods for Chemical Analysis of Water and Wastes (EPA); Methods for Determination of Inorganic Substances in Environmental Samples (EPA); Standard Methods for the Examination of Water and Wastewater (APHA/AWWA/WEF); and Soil, Plant and Water Reference Methods for the Western Region (WREP 125). Accepted editions shall be those that are approved for use by the United States Environmental Protection Agency or the California Department of Public Health's Environmental Laboratory Accreditation Program. The Discharger may propose alternative methods for approval by the Executive Officer. Where technically feasible, laboratory reporting limits shall be lower than the applicable water quality objectives for the constituents to be analyzed.

#### **ARSA CONVEYANCE SYSTEM MONITORING**

The Discharger shall monitor the wastewater conveyance and storage system on a weekly basis for sewer odors, spills or overflows, and leaks or seepage from the Sutter Creek Wastewater Treatment Plant outfall to the Preston Reservoir outfall. The operators shall keep a log of visual inspections made of the wastewater conveyance and storage system. This information shall be submitted in the monthly reports. In addition, the Discharger shall monitor all the stock watering troughs on a weekly basis and shall record any spills, overflows, or

leaks. This information shall be submitted in the monthly reports.

### ARSA STORAGE RESERVOIR MONITORING

Samples shall be collected from established sampling stations located in areas that will provide a sample representative of the wastewater in Henderson Reservoir, Preston Forebay, and Preston Reservoir. Freeboard will be measured vertically from the surface of the pond water to the lowest elevation of the surrounding berm or the bottom of the spillway and shall be measured to the nearest 0.25 feet. Flow monitoring shall be conducted at the outfall outlet for each reservoir. Monitoring of all three reservoirs shall include, at a minimum, the following:

Constituent	Units	Type of Sample	Sampling Frequency	Reporting Frequency
Flow	Gallons	Continuous		
Freeboard	Feet	Measurement	Twice-weekly, see note No.1	Monthly
Dissolved Oxygen	mg/L	Grab	Weekly	Monthly
рН	pH units	Grab	Monthly	Monthly

Note No1: Twice-weekly shall mean two observations per week, 3 days apart.

#### ARSA HENDERSON RESERVOIR EFFLUENT MONITORING

Effluent samples shall be collected downstream from the last connection through which wastes can be admitted from the Henderson Storage Reservoir. Samples collected from the outlet structure for the effluent slide gate valve shall be considered acceptable. Grab samples are considered adequately composited to represent the effluent. Effluent monitoring shall include, at a minimum, the following:

Constituents	Units	Type of Sample	Sampling Frequency	Reporting Frequency
Total Coliform Organisms, see note No.1	MPN/100 mL	Grab	Monthly	Monthly
Electrical Conductivity	µmhos/cm	Grab	Monthly	Monthly
Total Arsenic	mg/L	Grab	Monthly	Monthly

Note No.1: Using a minimum of 15 tubes or three dilutions

### ARSA WASTEWATER DISPOSAL MONITORING

Constituent	Units	Type of Sample	Sampling Frequency	Reporting Frequency
Flow	gallons	Continuous	Daily	Monthly
Rainfall, see note No.1	Inches	Measurement	Daily	Monthly
Acreage Applied, see note No.2	Acres	Calculated	Daily	Monthly
Water Application Rate, see note No. 2	inches/day	Calculated	Daily	Monthly
Total Nitrogen Loading Rate, see note No. 2	lbs./ac/month	Calculated	Monthly	Monthly

Note: 1: As measured at the weather station which is nearest to the disposal site.

2: Specific disposal fields shall be identified.

# CITY OF IONE TERTIARY TREATMENT PLANT INFFLUENT MONITORING

Influent samples shall be collected at a sampling station prior the wastewater entering the tertiary treatment plant. Influent monitoring shall be included, at a minimum, the following:

Constituents	Units	Type of Sample	Sampling Frequency	Reporting Frequency
Combined Flow from CDCR and ARSA	gallons	Meter Observation/or calculation	Monthly	Monthly
CDCR Flow	gallons	Meter Observation/or Calculation	Monthly	Monthly
ARSA flow	gallons	Meter Observation/ or Calculation	Monthly	Monthly
Volatile Organic Compounds (VOCs), see note No.1	µg/L	Grab	Weekly	Monthly

Note: 1. VOCs shall be analyzed by EPA method 8260B or equivalent. Analysis shall include the full list of VOC analytes.

### CITY OF IONE TERTIARY TREATMENT PLANT EFFLUENT MONITORING

Effluent samples shall be collected (during operation) downstream from the last connection through which wastes can be admitted from the City of Ione's tertiary treatment plant to Castle Oaks Golf Course irrigation storage reservoirs. Samples collected from the outlet structure at the chlorine contact channel shall be considered acceptable. Grab samples are considered adequately composited to represent the effluent. Effluent monitoring shall include, at a minimum, the following:

Constituents	Units	Type of Sample	Sampling Frequency	Reporting Frequency
Flow	gallons	Continuous	Daily	Monthly
Turbidity	NTU	Continuous	Daily	Monthly
Total Chlorine Residual	mg/L	Grab	Daily	Monthly
Total Coliform Organisms, see note No.1	MPN/100 mL	Grab	Daily	Monthly
рН	pH units	Grab	Weekly	Monthly
BOD5	mg/L	Grab	Weekly	Monthly
Nitrate as Nitrogen	mg/L	Grab	Weekly	Monthly
Total Arsenic	mg/L	Grab	Monthly	Monthly
Electrical Conductivity	µmhos/cm	Grab	Monthly	Monthly
Volatile Organic Compounds (VOCs), see note No.2	μg/L	Grab	Weekly	Monthly
Standard Minerals, see note No 3.	mg/L	Grab	Annually	Annually

Note: 1. Using a minimum of 15 tubes or three dilutions.

- 2. VOCs shall be analyzed by EPA method 8260B or equivalent. Analysis shall include the full list of VOC analytes.
- 3. Standard Minerals shall include, at a minimum, the following elements and compounds: boron, calcium, chloride, dissolved iron, magnesium, dissolved manganese, potassium, sodium, sulfate, total alkalinity (including alkalinity series), and hardness. Samples for metals analysis shall be filtered prior to preservation and digestion using a 0.45-micron filter.

### CASTLE OAKS GOLF COURSE IRRIGATION STORAGE POND MONITORING

Samples shall be collected from established sampling stations located in areas that will provide a sample representative of the wastewater in the Castle Oaks Golf Course irrigation storage ponds. Freeboard will be measured vertically from the surface of the pond water to the lowest elevation of the surrounding berm and shall be measured to the nearest 0.25 feet. Monitoring of all storage ponds shall include, at a minimum, the following:

		Type of Sampling		Reporting
Constituent	Units	Sample	Frequency	Frequency
Freeboard	Feet	Measurement	Twice-weekly, See note No.1	Monthly
Odors		Observation	Weekly	Monthly
Dissolved Oxygen	mg/L	Grab	Weekly	Monthly
рН	pH units	Grab	Monthly	Monthly

Note: 1. Twice-weekly shall mean two observations per week, 3 days apart.

# CASTLE OAKS GOLF COURSE FIELD MONITORING

Monitoring of the irrigated area shall be conducted daily (during operation) and the results shall be included in the monthly monitoring report. Evidence of erosion, field saturation, runoff, or the presence of nuisance conditions shall be noted in the report. Reclaimed water shall also be monitored to ascertain disposal rates. Monitoring of the disposal fields shall include the following:

Constituent	Units	Type of Sample	Sampling Frequency	Reporting Frequency
Flow	gallons	Continuous	Daily	Monthly
Rainfall, See note No.1	Inches	Measurement	Daily	Monthly
Acreage Applied, See note No.2	Acres	Calculated	Daily	Monthly
Tailwater Runoff Observation		Observation	Daily	Monthly

Note: 1. As measured at the weather station which is nearest to the disposal site.

2. Specific disposal fields shall be identified.

# CASTLE OAKS GOLF COURSE GROUNDWATER MONITORING

Prior to sampling, depth to groundwater measurements shall be measured in each monitoring

well to the nearest 0.01 feet. Groundwater elevations shall then be calculated to determine groundwater gradient and flow direction. Monitoring wells to be sampled shall be purged of at least three well volumes until temperature, pH, and electrical conductivity have stabilized. Low or no-purge sampling methods are acceptable, if described in an approved Sampling and Analysis Plan. Samples shall be collected and analyzed using standard EPA methods. Groundwater monitoring shall include, at a minimum, the following:

Constituent	Units	Type of Sample	Sampling Frequency	Reporting Frequency
Groundwater Elevation, see note No. 1	0.01 feet	Measurement	Quarterly	Quarterly
Depth to Groundwater	0.01 feet	Measurement	Quarterly	Quarterly
Gradient	feet/foot	Calculated	Quarterly	Quarterly
Gradient Direction	degrees	Calculated	Quarterly	Quarterly
рН	S.U.	Grab	Quarterly	Quarterly
Total Dissolved Solids	mg/L	Grab	Quarterly	Quarterly
Electrical Conductivity	µmhos/cm	Grab	Quarterly	Quarterly
Nitrate as Nitrogen	mg/L	Grab	Quarterly	Quarterly
Nitrite as Nitrogen	mg/L	Grab	Quarterly	Quarterly
Ammonia as Nitrogen	mg/L	Grab	Quarterly	Quarterly
Total Coliform Organisms, see note No. 2	MPN/100 mL	Grab	Quarterly	Quarterly
Volatile Organic Compounds (VOCs), see note No. 3	µg/L	Grab	Quarterly	Quarterly
Standard Minerals, see note No 4.	mg/L	Grab	Annually	Annually

Notes:

- 1. Groundwater elevations shall be based on depth-to-water using a surveyed measuring point elevation on the well and a surveyed reference elevation.
- 2. Using a minimum of 15 tubes or three dilutions.
- 3. VOCs shall be analyzed by EPA method 8260B or equivalent. Analysis shall include the full list of VOC analytes.
- 4. Standard Minerals shall include, at a minimum, the following elements and compounds: arsenic, boron, calcium, chloride, dissolved iron, magnesium, dissolved manganese, potassium, sodium, sulfate, total alkalinity (including alkalinity series), and

hardness. Samples for metals shall be filtered prior to preservation and digestion using a 0.45-micron filter.

#### SOLIDS/SLUDGE DISPOSAL MONITORING

The Discharger shall keep records regarding the quantity of biosolids generated by the ARSA storage reservoirs, ARSA conveyance system, City of lone tertiary treatment plant, and the Castle Oaks golf course irrigation storage ponds; any sampling and analytical data; and the quantity removed for disposal. The records shall also indicate the steps taken to reduce objectionable odors

and other nuisance conditions. Records shall be stored onsite and available for review during inspections.

If biosolids are transported off-site for disposal, then the Discharger shall submit records identifying the hauling company, the amount of biosolids transported, the date removed from the facility, the location of disposal, and copies of all analytical data required by the entity accepting the waste. All records shall be submitted as part of the Annual Monitoring Report.

#### REPORTING

Each monitoring report shall be submitted as a single report under one cover, signed by the appropriate representative for each Discharger. The Dischargers are held equally responsible for the submittal of complete and adequate monitoring reports, regardless of how the Dischargers decide to distribute the monitoring and reporting responsibilities.

All monitoring reports should be converted to a searchable Portable Document Format (PDF) and submitted electronically. Documents that are less than 50MB should be emailed to: <u>centralvalleysacramento@waterboards.ca.gov.</u>

Documents that are 50 MB or larger should be transferred to a CD, DVD, or flash drive and mailed to the following address:

Central Valley Regional Water Quality Control Board ECM Mailroom 11020 Sun Center Drive, Suite 200 Rancho Cordova, California 95670

Please include a transmittal sheet that includes the following:

Attention: Compliance/Enforcement Section Amador Regional Outfall, Castle Oaks Golf Course, Amador Regional Sanitation Authority, and City of Ione Amador County Place ID: 205398

In reporting monitoring data, the Discharger shall arrange the data in tabular form so that the date, sample type (e.g., effluent, pond, etc.), and reported analytical result for each sample are readily discernible. The data shall be summarized in such a manner to clearly illustrate compliance with waste discharge requirements and spatial or temporal trends, as applicable. The results of any monitoring done more frequently than required at the locations specified in the Monitoring and Reporting Program shall be reported to the Regional Board.

As required by the California Business and Professions Code Sections 6735, 7835, and 7835.1, all Groundwater Monitoring Reports shall be prepared under the direct supervision of a Registered Engineer or Geologist and signed by the registered professional.

If violations occur, the Discharger shall notify the Central Valley Water Board within 10 business days after receiving the analytical laboratory reports.

# A. Monthly Monitoring Reports

Monthly reports shall be submitted to the Central Valley Water Board on the **1**<sup>st</sup> **day of the second month following sampling** (i.e. the January Report is due by 1 March). At a minimum, the reports shall include:

- 1. Results of conveyance system, storage reservoir, Henderson Reservoir effluent, disposal fields, tertiary treatment plant influent and effluent, golf course disposal fields, and golf course storage reservoir monitoring.
- 2. A comparison of monitoring data to the discharge specifications and an explanation of any violation of those requirements. Data shall be presented in tabular format.
- 3. Inspection logbook entries for the ARSA conveyance system, ARSA disposal fields and Castle Oaks golf course disposal field monitoring. The report shall also include the daily calculations.
- 4. Copies of laboratory analytical report(s); and
- 5. A calibration log verifying calibration of all handheld monitoring instruments and devices used to comply with the prescribed monitoring program.

# **B.** Quarterly Monitoring Reports

The Discharger shall establish a quarterly sampling schedule for groundwater monitoring such that samples are obtained approximately every three months. Quarterly monitoring reports shall be submitted to the Board by the **1**<sup>st</sup> **day of the second month after the quarter** (i.e. the January-March quarter is due by May 1<sup>st</sup>) each year. The Quarterly Report shall include the following:

- 1. Results of groundwater monitoring.
- 2. A narrative description of all preparatory, monitoring, sampling, and analytical testing activities for the groundwater monitoring. The narrative shall be sufficiently detailed to verify compliance with the WDRs, this MRP, and the Standard Provisions and Reporting Requirements. The narrative shall be supported by field logs for each well documenting depth to groundwater; parameters measured before, during, and after purging; method of purging; calculation of casing volume; and total volume of water purged; sample preparation (e.g., filtering); and sample preservation.
- 3. Calculation of groundwater elevations, an assessment of groundwater flow direction and gradient on the date of measurement, comparison of previous flow direction and gradient data, and discussion of seasonal trends if any;
- 4. A narrative discussion of the analytical results for all groundwater locations monitored including spatial and temporal tends, with reference to summary data tables, graphs, and appended analytical reports (as applicable);
- 5. A comparison of monitoring data to the groundwater limitations and an explanation of any violation of those requirements;
- 6. Summary data tables of historical and current water table elevations and analytical results;
- 7. A scaled map showing relevant structures and features of the facility, the locations of monitoring wells and any other sampling stations, and groundwater elevation contours referenced to mean sea level datum;
- 8. Copies of laboratory analytical report(s) for groundwater monitoring.

# C. Annual Monitoring Reports

An Annual Report shall be prepared as the fourth quarter monitoring report. The Annual Report will include all monitoring data required in the monthly/quarterly schedule. The Annual Report shall be submitted to the Regional Board by **1 February** each year. In addition to the data normally presented, the Annual Report shall include the following:

- 1. Tabular and graphical summaries of all data collected during the year;
- 2. An evaluation of the performance of the tertiary treatment system which demonstrates the facility's ability to consistently meet treatment standards for recycled water use on a public golf course specified in Title 22, Division 4, CCR (Section 60301, et seq.), as well as a forecast of the flows anticipated in the next year;
- 3. A discussion of compliance and the corrective action taken, as well as any planned or proposed actions needed to bring the discharge into full compliance with the waste discharge requirements.
- 4. A discussion of any data gaps and potential deficiencies/redundancies in the monitoring system or reporting program.
- 5. Summary of information on the disposal of biosolids as described in the "Biosolids Monitoring" section.
- 6. A discussion of whether the Discharger anticipates removing biosolids in the coming year, and if so, the anticipated schedule for cleaning, drying, and disposal;

# D. State Water Board Volumetric Annual Reporting

#### Per State Water Resources Control Board's Water Quality Control Policy

(https://www.waterboards.ca.gov/water\_issues/programs/water\_recycling\_policy/), amended in December 2018, dischargers of treated wastewater and recycled waterare required to report annually monthly volumes of influent, wastewater produced, and effluent, including treatment level and discharge type. The Discharger shall submit an annual report to the State Water Board by **April 30 of each calendar year** furnished with the information detailed below. The Discharger must submit thisannual report containing monthly data in electronic format via the State Water Board's Internet <u>GeoTracker system</u> (http://geotracker.waterboards.ca.gov/). Required data shall be submitted to the GeoTracker database under a site-specificglobal identification number. Any data will be made publicly accessible as machine readable datasets. The Discharger must report all applicable items listed below:

- 1. **Influent.** Monthly volume of wastewater collected and treated by the wastewater treatment plant.
- 2. **Production.** Monthly volume of wastewater treated, specifying level of treatment.
- 3. **Discharge.** Monthly volume of treated wastewater discharged to land, where beneficial use is not taking place, including evaporation or percolation ponds, overland flow, or spray irrigation disposal, excluding pasture of fields with harvested grounds.
- 4. Reuse. Monthly volume of recycled water distributed.
- 5. **Reuse Categories.** Annual volume of treated wastewater distributed for beneficial use in compliance with California Code of Regulations, Title 22 ineach of the use categories listed below:
  - a. Agricultural irrigation: pasture or crop irrigation.
  - b. Landscape irrigation: irrigation of parks, greenbelts, and playgrounds; school yards; athletic fields; cemeteries; residential landscaping, common areas; commercial landscaping; industrial landscaping; and freeway, highway, and street landscaping.
  - c. Golf course irrigation: irrigation of golf courses, including water used to maintain aesthetic impoundments within golf courses.
  - d. Commercial application: commercial facilities, business use (such as laundries and office buildings), car washes, retail nurseries, and appurtenant landscaping that is not separately metered.
  - e. Industrial application: manufacturing facilities, cooling towers, process water, and appurtenant landscaping that is not separately metered.
  - f. Geothermal energy production: augmentation of geothermal fields.
  - g. Other non-potable uses: including but not limited to dust control, flushing sewers, fire protection, fill stations, snow making, and recreational impoundments.
  - h. Groundwater recharge: the planned use of recycled water for replenishment of a groundwater basin or an aquifer that has been designated as a source of water supply for a public water system. Includes surface or subsurface application, except for seawater intrusion barrier use.
  - i. Reservoir water augmentation: the planned placement of recycled water into a raw surface water reservoir used as a source of domestic drinking water supply for a public water system, as defined in section 116275 of the Health and Safety Code, or into a constructed system conveying water to such a reservoir (Water Code § 13561).

- j. Raw water augmentation: the planned placement of recycled water into a system of pipelines or aqueducts that deliver raw water to a drinking water treatment plant that provides water to a public water system as defined in section 116275 of the Health and Safety Code (Water Code§ 13561).
- k. Other potable uses: both indirect and direct potable reuse other than for groundwater recharge, seawater intrusion barrier, reservoir water augmentation, or raw water augmentation.

A letter transmitting the monitoring reports shall accompany each report. The letter shall report violations found during the reporting period, and actions taken or planned to correct the violations and prevent future violations. The transmittal letter shall contain the following penalty of perjury statement and shall be signed by the Discharger or the Discharger's authorized agent:

"I certify under penalty of law that I have personally examined and am familiarwith the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

The Discharger shall implement the above monitoring program on the first day of the month following issuance of this revised MRP.

This Order is issued under authority delegated to the Executive Officer by the Central Valley Water Board pursuant to Resolution R5-2018-0057 and is effective upon signature.

Ordered by: Original Digitally Signed by John J. Baum on Date: 2021.10.21 15:59:05-07'00'

for PATRICK PALUPA, Executive Officer